

Amendments to the Claims

1. **(Original)** In a mobile telecommunications system, a method of directing data units from buffer means to channels for transmission of the data units, the method comprising:

- a. providing a set of information channels for connection to the buffer means, and providing a set of transport channels for transmission of the data units,
- b. selecting a subset of said set of information channels and a subset of said set of transport channels for interconnection, characterised by:
- c. selecting for each transport channel one or a plurality of information channels to be multiplexed on the transport channel,
- d. prioritising the selected information and/ or transport channels according to a predetermined scheme, in dependence on the characteristics of the information channels and/or the data to be transmitted therethrough; and
- e. determining how many data units may be transmitted from the respective buffer means to the transport channels in a timing interval.

2. **(Currently Amended)** ~~In the~~ A method according to claim 1, in which the mobile telecommunication system is a Universal Mobile Telecommunications System, a method of directing data units from the buffer means is in the a Radio Link Control Layer (RLC) layer, and to the transport channels are in the a Medium Access Control (MAC) layer for transmission of the data units as claimed in claim 1, the method including providing a set of information channels in the RLC layer for connection to the buffer means, and providing a set of transport channels in the MAC layer for transmission of the data units[.].

3. **(Original)** A method according to claim 1 or 2, wherein, in step d, the transport channels are prioritised according to the characteristics of the information channels and/or the data to be transmitted therethrough.

4. **(Original)** A method according to claim 3, wherein, in step d, the transport channels are prioritised according to the characteristics of the information channels.

5. **(Currently Amended)** A method according to claim 1, wherein for steps d and e, a reference mapping table is formed to relate the transport channels to the information channels with the elements of the table comprising ~~the~~ a respective buffer status.

6. **(Currently Amended)** A method according to claim 5, wherein ~~the~~ a first row or column of the table contains ~~the~~ a highest priority transport channel, and ~~the~~ a second row or column ~~the~~ a next highest priority channel.

7. **(Original)** A method according to claim 6, wherein for each row or column, the multiplexed information channels are arranged in sequence in order of descending priority.

8. **(Original)** A method according to any of claims 5 to 7, wherein a transport block combination table is formed to relate the number of data units which may be transmitted at each timing interval on each transport channel.

9. **(Original)** A method according to claims 1, 2, 4, 5, 6, or 7, wherein the method is carried out for each consecutive transmission timing interval (TTI).

10. **(Original)** A method according to claim 9, wherein the TTI is the minimum TTI assigned for a transport channel, and those transport channels having assigned a longer TTI are not selected in the next TTI.

11. **(Original)** Apparatus in a mobile telecommunications system for directing data units from buffer means (161-163) to channels (DCH) for transmission of the data units, comprising:

a set of information channels (DTCH, DCCH) for connection to the buffer means, and a set of transport channels (DCH) for transmission of the data units,

means for selecting a subset of said set of information channels and a subset of said set of transport channels for interconnection, characterised by:

means (14) for selecting for each transport channel one or a plurality of information channels to be multiplexed on the transport channel,

means for prioritising the selected information and/or transport channels according to a predetermined scheme; in dependence on their characteristics and/or the data to be transmitted therethrough; and

means for determining for such information channels how many data units may be transmitted from the respective buffer means.

12. **(Original)** Apparatus according to claim 11, wherein the prioritising means is arranged to prioritise the transport channels.

13. **(Original)** Apparatus according to claim 12, wherein the prioritising means is arranged to prioritise the transport channels in dependence on the characteristics of the information channels.

14. **(Original)** Apparatus according to any of claims 11 to 13, wherein the prioritising means is arranged to construct a mapping table (32) to relate the transport channels to the information channels with elements of the table being formed by respective buffer status.

15. **(Original)** Apparatus according to claim 14, wherein the prioritising means is arranged to construct a transport block combination table (34) to relate

the number of data units which may be transmitted at each timing interval on each transport channel.

16. **(Original)** Apparatus according to claim 15, wherein the prioritising means is operative to determine priorities for each consecutive transmission timing interval.

17. **(Original)** Apparatus according to claim 16, wherein the prioritising means is operative to determine priorities for each minimum transmission timing interval, but excluding those channels which are continuing with a longer transmission interval.